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X GROVE-TO-RETAIL MARGINS FOR FLORIDA VALENCIA ORANGES

Marketed in Fresh Form in Selected Cities, 1940-48



UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics.

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GROVE-TO-RETAIL MARGINS FOR FLORIDA VALENCIA ORANGES
Marketed in Fresh Form in Selected Cities, 1940-48 1/

By William C. Lilieholm, Agricultural Economist

SUMMARY AND CONCLUSIONS

Growers of Valencia oranges in Florida during the 1947-48 season received a return equivalent to 17 percent of the consumer's dollar spent for oranges in eight major consuming markets. This return was slightly less than the 19 percent received by Valencia growers in 1941, and considerably less than half of the 43 percent they received in 1946. The eight markets studied were Boston, New York, Philadelphia, Baltimore, Pittsburgh, Cleveland, Cincinnati, and Chicago. These markets received 50 percent of all oranges shipped by rail from Florida during the 1947-48 season.

Total marketing charges increased from 57 percent of the consumer's dollar in 1946 to 83 percent in 1948. This increase in the share represented by marketing charges was due to the fact that retail prices for Valencia oranges declined by 22 percent, whereas marketing charges actually increased. Total marketing charges increased by \$0.15 and the retail price per box decreased by \$1.52 between 1945 and 1948.

The outstanding fact disclosed by the study upon which this report is based is that between 1945 and 1948, growers of Valencia oranges absorbed the entire decrease in retail prices, in addition to the increase in total marketing charges through a reduction in grower's return.

Retail prices for Florida Valencia oranges were 13 percent higher in New York, Boston, and Philadelphia in 1948 than in the other five cities included in the study. The combined wholesale and retail margin in these three cities was 35 percent higher in 1948 than in the other five cities. The higher costs of distribution in these three markets may indicate possible inefficiencies in marketing. If the combined wholesale and retail margins had been the same in the eastern cities as in the other cities, it might have been possible for producers of Valencia oranges shipped to these three markets to receive 34 percent more than they did in 1947, and 39 percent more than in 1948.

1/ This study is one of a series presenting measurements of costs and margins involved in marketing farm products conducted under the Research and Marketing Act of 1946. Other studies designed to provide the basis for lower costs and increased efficiency are being undertaken in the Department and at State experiment stations.

From 1940 to 1948, costs of picking and assembling increased 42 percent. The increase probably would have been larger had the growers not changed to a cheaper method of picking--pulling rather than clipping. The scarcity of grove labor during World War II and the lack of competition in regard to quality permitted the use of pulling. Any increase in the availability of labor, increased competition for markets, or a combination of the two may send producers back to clipping the oranges again.

Substitution of the less expensive wire-bound boxes for standard boxes held the increase in the packing and selling margin from 1940 to 1948 to 41 percent; this increase is the same as the increase in the picking and assembling margin. The extent to which the costs of labor and materials have increased is not entirely reflected in the packing and selling margin, not only because of the less expensive containers but also because of the decreased attention to quality.

Motortruck shipments of oranges have increased rapidly since the war. A 43-percent increase in rail rates between 1946 and 1948, a shorter time taken in transit, and an increased availability of motortrucks, are encouraging the further development of truck transportation. Freight rates were lower to the eastern cities than to the other cities (with the exception of Baltimore and Cincinnati) which apparently indicates that the difference in freight rates is not the cause of the higher marketing margins found in these eastern cities.

Several of the auction markets in the eight cities are owned by railroad companies, and truck shipments are restricted in them. Some auction markets are completely closed to motortrucks. Restriction of truck shipment is forcing fruit into other methods of sale and is necessitating additional facilities equipped to handle trucks. In all years of the study, auction charges for the eight markets averaged 2 percent of the retail price.

A downward trend of the combined wholesale and retail margins from 1940 to 1943 appeared to be checked by the enactment of price controls in 1944. Price controls produced a leveling effect in the wholesale and retail margin for the eight cities. With retail prices maintained at ceiling levels and f.o.b. prices lower than was anticipated under price control, the combined wholesale and retail margin took a greater portion of the consumer's dollar than had been expected.

After price ceilings were removed, marketing agencies did not reduce their margins to the level that had prevailed before the regulations of OPA. Although the retail price of Florida Valencia oranges decreased 22 percent from 1945-48, the combined wholesale and retail margin decreased only 8 percent. This is an illustration of the comparative rigidity of marketing charges; this rigidity in turn is largely due to inflexibility in some of the costs incurred by business firms in rendering marketing services.

PROBLEMS CONFRONTING THE INDUSTRY

Production of Valencia oranges in Florida increased by more than 27 million boxes, or 174 percent, during the period 1940-48. In the 5-year period ended in 1939, the average annual crop was 8.4 million boxes. Beginning in 1940, there were successive annual increases in output until the record crop of 27.4 million boxes was reached in 1948. 2/ The rather favorable prices in the late 1930's were an incentive toward increased production in the early part of the period under study. In 1940 and 1941 the increased production together with the loss of the export market for any United States oranges because of the war in Europe depressed market prices. After the United States entered World War II, heavy military purchases and increased purchasing power of domestic outlets maintained prices effectively. At the end of the war, however, the grower's return was reduced as, on the one hand, military purchases were sharply curtailed and retail prices declined, while on the other, the costs of marketing services increased. Prices declined precipitously.

Citrus fruit growers and shippers in Florida became particularly interested in the costs of marketing soon after the decline in the price of citrus fruits started in 1946. They requested the United States Department of Agriculture to study the costs involved and the margins taken at each step in the marketing of citrus fruits from grower to consumer. They believed that the results of such studies would point out the areas within the marketing system in which costs could be reduced and efficiency of marketing citrus fruits could be increased. The request was made through the Citrus Advisory Committee to the Administrator of the Research and Marketing Act; the Committee recommended that the United States Department of Agriculture study the costs and methods of marketing citrus fruits, including methods of handling, services performed, costs of services, means of reducing charges, and means of eliminating the duplication of services.

This report deals only with Florida Valencia oranges marketed in fresh form. As processors now serve as the outlet for more than half of the annual orange crop, processed citrus can no longer be considered a byproduct. In the 1939-40 season only 17 percent of the Florida orange crop was processed; in the 1945-46 season 38 percent was processed. By 1947-48, however, processors were taking 52 percent. This change is significant from the viewpoint of grower's return and the marketing margins. It must be taken into consideration when any attempt is made to forecast future market conditions which now appear likely to be erratic.

2/ United States Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Disposition, Value, and Utilization of Sales. Crop seasons 1909-10--1943-44; 1940-41--1946-47; 1946-47 and 1947-48. Washington, D.C., October 1945, 1947-1948.

PURPOSE AND PROCEDURES OF THE STUDY

The purpose of the study upon which this report is based was to learn the margins taken at each step in marketing Valencia oranges grown in the interior of Florida through eight selected auction markets, to learn in detail the services associated with each charge, and, so far as possible, to ascertain the costs of these services in the period 1940-48.

This period covers a cycle of variations in price, from a low in 1940 and 1941 to high during 1946, followed by another period of depressed prices in 1947 and 1948.

During the 1947-48 season, the eight auction markets--Boston, New York, Philadelphia, Baltimore, Pittsburgh, Cleveland, Cincinnati, and Chicago--received 19,704 carloads of Florida oranges, or 50 percent of the total rail shipments of 39,000 cars from that State. ^{3/} During that season, 71 percent of all Florida oranges marketed out of the State were shipped by rail. ^{4/} The percentage distribution of the average margins incurred in marketing Florida Valencia oranges in the eight cities is shown in figure 1. The break-down of the retail price in dollars per box for Valencia oranges marketed in New York and Chicago is shown in figures 2 and 3 (pages 12 and 13). The break-down of the retail price in dollars per box for each of the cities is shown in tables 1 through 9 (pages 14 to 22).

The costs and margins involved in marketing Florida oranges from 1940 to 1948, the period covered by the study, were ascertained on the basis of secondary data and were calculated from the regularly reported auction-price series and the retail-price series. Weighted-average auction prices, obtained from the Market News Service of the Production and Marketing Administration, were subtracted from weighted-average retail prices of the Bureau of Labor Statistics to learn the joint wholesale-and-retail margin. An estimated 5-percent allowance has been made to cover the waste, spoilage, and shrinkage that occurs between the groves and the retail sales. ^{5/}

^{3/} United States Production and Marketing Administration, and Florida State Marketing Bureau. Marketing Florida Citrus, Market News Service on Fruits and Vegetables, 1947-48 Season. Lakeland, Fla., 1948.

^{4/} Florida Citrus Commission, Growers Administrative Committee and Shippers Advisory Committee. Marketing Policies - Florida Citrus, 1948-49 Season. Lakeland, Fla., 1948.

^{5/} United States Production and Marketing Administration. Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products. Washington, D. C. 1947.

MARKETING MARGINS AND COSTS

Growers' Return

The price per box to the grower is the retail price minus marketing charges. The trend in grower's return, as it is affected by marketing charges, is best expressed in terms of the percentage of the consumer's dollar that can be allocated to a grower after finding the average retail price and the average marketing cost for oranges in the eight cities. The average return to growers increased steadily between 1940 and 1946, but in 1946 a decline began which, by 1948, had reduced this return to the prewar level. In 1948, an average of 30.17 of every consumer's dollar spent at retail for Florida Valencia oranges in the eight cities was returned to the grower. The remaining \$0.83 was absorbed by marketing charges incurred between the "on-tree" return to the grower and the dollar paid at retail by the consumer. The spread in total marketing charges varied from \$4.05 a box sold in Baltimore to \$4.22 a box sold in Boston.

Higher retail prices were found in the eastern markets of Philadelphia, New York, and Boston. Joint wholesale and retail margins found in these cities were higher than those in the other cities included in the study. Freight rates were lower to the eastern cities than to the other cities (with the exception of Baltimore and Cincinnati) which would indicate that the difference in freight rates is not the cause of the higher marketing margins incurred on fruit marketed in these eastern cities. The higher combined wholesale and retail margins in these cities reflect higher costs of distribution and may indicate possible marketing inefficiencies in these markets. The higher retail prices in these markets may be partly attributed to the inclusion of Indian River oranges in the retail prices--these oranges are usually sold at premium prices. As practically all Indian River oranges are sold in New York, Philadelphia, and Boston, this factor would not affect retail prices in the other markets. ^{6/} The adjusted margin for wholesaling and retailing in the eastern markets in 1947 was 29 percent higher than the other cities and in 1948 it was 26 percent higher. ^{7/} If the combined wholesale-and-retail margins had

^{6/} See footnote 3, page 4.

^{7/} Indian River oranges were excluded from the auction prices collected, as the primary emphasis was to be on interior Valencias, but it was impossible to exclude them from the retail prices obtained from the Bureau of Labor Statistics. For this reason, the combined wholesale and retail margin was abnormally high in those markets that carried Indian River fruit. The average retail price in New York, Boston, and Philadelphia in 1948 was 74 cents per box higher than the average retail price for the other five cities. If Indian River Valencia oranges are included in calculating average auction prices, the average auction price is increased by 21 cents. Thus, the increase accounts for 28 percent of the difference in average retail price between the two groups of cities in 1948 and 24 percent in 1947. Even if this adjustment in auction prices is made in order to account for Indian River oranges in the eastern markets, the combined wholesale-and-retail margin is still considerably higher than in the remaining markets.

been the same in the eastern cities as in the other cities, it might have been possible for producers of Valencia oranges shipped to Boston, New York, and Philadelphia, to receive 34 percent more than they received in 1947, and 39 percent more than in 1948.

Decreases in retail prices for Valencia oranges from 1940 to 1941 caused proportionately greater decreases in the grower's margin. But speaking in averages, the Chicago retail price was either slightly lower or only a trifle higher than the New York retail price in all years of the study except 1940 and 1944. In 1940, the Chicago retail price was 10 percent higher than the New York price. Growers, however, received only \$1.19 per box of oranges sold in Chicago as against \$1.23 for those sold in New York.

In 1944, the Chicago retail price was 4 percent higher than the New York price. Although this difference is small, the return to the grower was \$2.01 per box sold in Chicago as against \$2.27 per box sold in New York. As a percentage of the consumer's dollar, the combined wholesale and retail margin in 1944 was 40 percent in Chicago and 36 percent in New York. These comparisons in the 2 years 1940 and 1944, point out that producers in Florida received considerably less for their Valencia oranges sold in Chicago than for those sold in New York, although the average retail price was higher in Chicago.

With OPA ceilings in force in 1944, dollar returns to growers decreased for Valencia oranges sold in eight cities, whereas retail prices continued to increase. Returns to growers decreased more rapidly in cities where the lowest combined wholesale and retail margins were found in 1943. This was the last year before price controls went into effect for citrus, and it was the year when the smallest combined wholesale and retail margins were registered. The more rapid declines in growers' returns took place for Valencia oranges sold in Chicago, Cincinnati, Cleveland, and Philadelphia. Smaller decreases in growers' returns during 1944 were found on oranges marketed in cities in which the joint wholesale and retail margins were slightly below the highest in 1943. These cities were Baltimore, Boston, and Pittsburgh.

High consumer incomes enabled retailers to maintain the maximum legal prices under OPA despite the lower return to growers which resulted from a larger output. A similar condition obtained after OPA controls were removed when retail prices remained high although the return to growers dropped. From 1943 to 1946, the share of the consumer's dollar returned to the grower remained relatively constant. After price controls were removed in 1946, marketing agencies retained the margins to which they had become accustomed under OPA, although the returns to Valencia growers were reduced from \$2.68, or 43 percent, of the consumer's dollar in 1946, to \$0.94, or 17 percent, in 1948. Total marketing charges increased from 57 percent of the consumer's dollar in 1946 to 83 percent in 1948.

The actual increase in average total marketing charges of \$0.91 had a greater effect on the sharply reduced returns to growers than did the

reduction in average retail prices, \$0.91 as compared with \$0.83. Most of the increase in total marketing charges from 1946 to 1948 was accounted for in the increase of the combined wholesale and retail margin. The rigidity of the major components of the costs of marketing places the grower in a precarious position during any period of falling retail prices.

Picking and Assembling Costs

Costs of picking and assembling were obtained from the 1947-48 Annual Fruit and Vegetable Report of the Florida State Marketing Bureau. 8/ Season average costs were calculated by applying a factor showing the percentage these costs were of the total packinghouse expenses (based on a three-season average) to the total packinghouse expenses for the other years. Using the season average picking costs brings figures for charges that are somewhat higher than those actually incurred in picking Florida Valencia oranges, because the picking costs for seedlings are included. These season average costs were assumed to be constant for all markets.

Any differences in size of fruit marketed in specific markets and in costs of picking and assembling various sizes were not considered in the analysis. The data relating to picking and assembling are seasonal averages and are considered comparable for the 3-month period of March through May. Packinghouses usually take care of the picking and assembling, for oranges are usually sold by the growers on an "on-tree" basis. In instances in which a grower picked and hauled his fruit to the packer, these cost data were adjusted to an "on-tree" basis.

The combined picking and assembling margin increased from \$0.24 in 1940 to \$0.34 in 1948. The scarcity of labor during the war years and the increased cost of labor during and since the war forced the industry to resort to pulling rather than clipping the oranges in the picking process. Any increase in the availability of labor or the increased competition for markets, or a combination of the two, may cause a shift back to the practice of clipping.

Packing and Selling Costs

Packing of Florida oranges includes the following: Degreening or coloring, soaking, washing, drying, polishing, grading, sizing, packing in boxes, and loading into freight cars or trucks; and in some cases it includes the "color added," waxing, and precooling operations. Florida oranges are usually sold in one of three ways. They are sold through producer cooperative marketing organizations which normally handle the packing of fruit and the selling through their auction representatives in the larger markets. They are sold on consignment by growers, by independent shippers, or by cooperatives. Cash sales are made to buying brokers who are located in Florida but who represent a commission merchant or other purchaser in the consuming markets.

8/ Florida State Marketing Bureau. 1947-48 Annual Fruit and Vegetable Report, Jacksonville, Fla. 1948.

Season average costs of packing and selling the standard boxes and the standard wire-bound boxes were collected by the Florida Agricultural Experiment Station. The volumes of these two types of boxes entering each market were obtained from annual reports of the Market News Service and the Florida State Marketing Bureau. Percentages derived from these data were then used to reflect the cost of packing and selling for each market, depending on the volume of the two types of boxes that entered the particular market.

The cost of packing and selling Florida oranges increased from \$0.63 in 1940 to \$0.89 in 1948. The increased cost of labor and materials accounts for this increase, but the degree to which these costs have increased is not entirely reflected in the cost data mentioned above. The substitution of less expensive wire-bound boxes for some of the standard boxes reduced the relative cost of packing materials during the period of this study.

The use of wire-bound boxes increased 57 percent from 1940 to 1948, as measured by receipts in the markets. 9/ Apparently without this substitution and the use of other materials of lower cost, the expense of packing and selling would have increased from 63 cents in 1940 to \$1.03 in 1948. In the 1946-47 season, the cost of packing and selling Florida oranges by 73 packinghouses, using standard boxes, averaged \$1.01, whereas the same cost when wire-bound boxes were used was \$0.85. 10/ A box of either kind holds 1-3/5 bushels and weighs 90 pounds when filled. The proportion of the consumer's dollar accounted for by packing and selling costs decreased from 14 percent in 1940 to 11 percent in 1943; in 1948, this margin increased to 17 percent, which was equal to the return made to the Valencia grower during this year.

Freight Charges

Freight margins for all markets were based on rates from Lake Wales, a shipping point which is centrally located in the orange-producing area of Florida. These data were obtained from the Interstate Commerce Commission.

Florida oranges move to market by railroad, by motortruck, and by boat. Boat shipments ceased during the war and have not regained their prewar importance. In 1948, no shipments of Florida Valencia oranges were made by boat. Before World War II, railroads accounted for most of the

9/ United States Production and Marketing Administration, and Florida State Marketing Bureau. Marketing Florida Citrus, Market News Service on Fruits and Vegetables, 1939-40 Season to 1947-48 Season, Lakeland, Fla. October 1940--October 1948.

10/ Samuels, J.K., Fugett, K.A., Little, H.W. and Hamilton, H.G. Cost of Handling Florida and Texas Citrus Fruits in Fresh and Processed Form, 1946-47 Season. Gainesville, Fla. 1948.

shipments to markets in the eastern and East North Central States, and practically all oranges for these markets were shipped by railroad during the war. ^{11/} With the increased availability of trucks and their shorter time in transit, together with the higher rail rates now prevailing, an increasing tonnage has been moving by truck in the postwar years. Data on rail shipments to the eight cities are complete but data on truck shipments are fragmentary, and no exact quantitative comparisons can be made.

Freight charges for hauling a box of oranges from Lake Wales, Fla., to the eight cities averaged \$0.71 in 1940; \$0.68 in 1944, 1945, and 1946; \$0.79 in 1947; and \$0.97 in 1948. Freight charges were 43 percent higher in 1948 than in 1946. As a percentage of the average retail price, the average freight charge was 15 percent in 1940, 11 percent in 1944 and 1946, and 18 percent in 1948.

Auction Charges

Auction prices as given here are the average auction prices for Florida interior oranges sold in each city during March, April, and May. Use of these average prices as the prices of Florida Valencia oranges is considered adequate, as 80 percent of all interstate shipments of Florida Valencias took place during these 3 months; and only 7 percent of all other kinds of Florida oranges went into interstate shipments during this period. ^{12/} The auction commission and other auction charges on Florida oranges are used in calculating the auction margin for a particular city. ^{13/}

A shipper in Florida is usually represented by a broker who places the shipper's fruit for sale through the auction. The sale may be made to any person who buys at the auction, and the quantity sold may vary from a few boxes to several carload lots. Usually, auction sales are made to wholesale merchants who in turn sell to jobbers who service the retailing trade. The auction company does not take title to the fruit, but acts as a market place for sellers and buyers. The fruit is displayed there and sales and purchases are completed there. In most of the markets included in the study, the auction markets are owned by railroad companies. In several instances, motortruck receipts are either limited or prohibited.

Auction charges for a box of Florida Valencia oranges in the eight cities averaged \$0.09 in 1940 and 1941; \$0.13 in 1945 and 1946; and \$0.10 in 1948. During 1945 and 1946, both auction charges and auction prices reached their highest level. This direct relation between auction charges and auction prices is based on the auction commission rate (a percentage

^{11/} United States Production and Marketing Administration, Market News Division. Unloads of Fresh Fruits and Vegetables. Washington, D.C., 1940 to 1948.

^{12/} See footnote 4, page 4.

^{13/} Data on auction margins obtained from field offices of Market News Division, United States Production and Marketing Administration, Washington, D.C.

of the auction price), which is one of the determining factors of the auction's margin. As no changes have been made in the method of determining the auction's share in the cities since 1940, the auction charges averaged 2 percent of the retail price for all years of the study.

Combined Wholesale and Retail Margin

The marketing services performed after the fruit is sold at auction are included in the combined wholesale and retail margin. ^{14/} As a percentage of the consumer's dollar, the joint wholesale and retail margin for Florida Valencia oranges declined from an average of 42 percent in 1940 to an average of 34 percent in 1943. During this period, the actual margin in dollars and cents increased slightly. In 1941, the combined wholesale and retail margin in actual terms declined slightly and returns to growers dropped materially. Although retail prices and returns to growers increased in 1942 over 1941, the share of the consumer's dollar represented by the combined wholesale and retail margin continued to decline. The reduction in this margin was checked in 1943, the year when OPA went into effect. From 1943 to 1945 (retail prices reached their highest level in 1945), the combined wholesale and retail margin steadily increased in actual terms but remained proportionately the same. The smallest proportionate share of the consumer's dollar for this margin during the entire study was the \$0.26 margin in 1946.

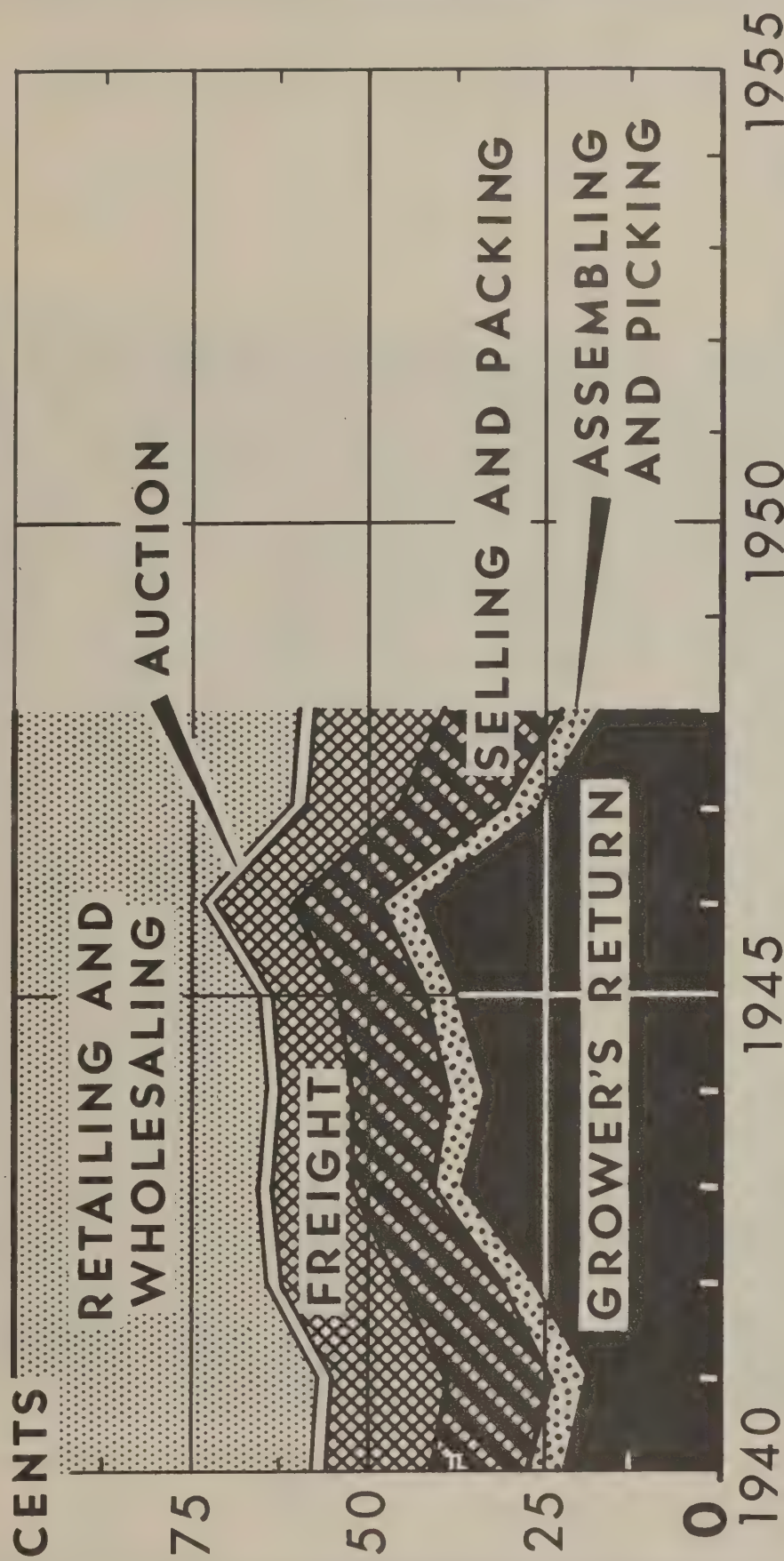
In 1946, retail prices of Florida Valencia oranges declined for the first time since 1941, but during the year growers received slightly higher actual returns than in 1945. The majority of the decline came about through the sharp cut in the combined wholesale and retail margin. In 1947, the combined wholesale and retail margin of \$2.34 was slightly below the 1945 level of \$2.37, although it was much above that of 1946. Retail prices continued to decline. As pointed out earlier, the Valencia grower's share was cut from \$2.68, or 43 percent, in 1946, to \$1.58, or 26 percent, in 1947, and to \$0.94, or 17 percent, in 1948. The greater part of this reduction in the return to growers resulted from the decrease in retail prices and, in addition, from an increase in total marketing charges.

Since the end of the war, the trend in retail prices of Florida Valencia oranges has been downward. In spite of efforts to reduce costs by substituting cheaper picking methods and containers, marketing costs have increased. Additional studies are needed to discover at what point more efficient operation may decrease marketing costs.

^{14/} A 5-percent waste factor was used in calculating the value of retail sales. Although the waste is deducted at the retail level it occurs at all stages in the marketing channel. Handlers normally include waste in their price-making considerations.

WHERE THE CONSUMER'S DOLLAR GOES

For Florida Valencia Oranges



BASED ON AVERAGES FOR EIGHT MAJOR CITIES, MARCH THROUGH MAY 1940-48

U. S. DEPARTMENT OF AGRICULTURE

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FIGURE 1

FLORIDA VALENCIA ORANGES: BREAK-DOWN OF THE NEW YORK RETAIL PRICE, MARCH THROUGH MAY, 1940-48

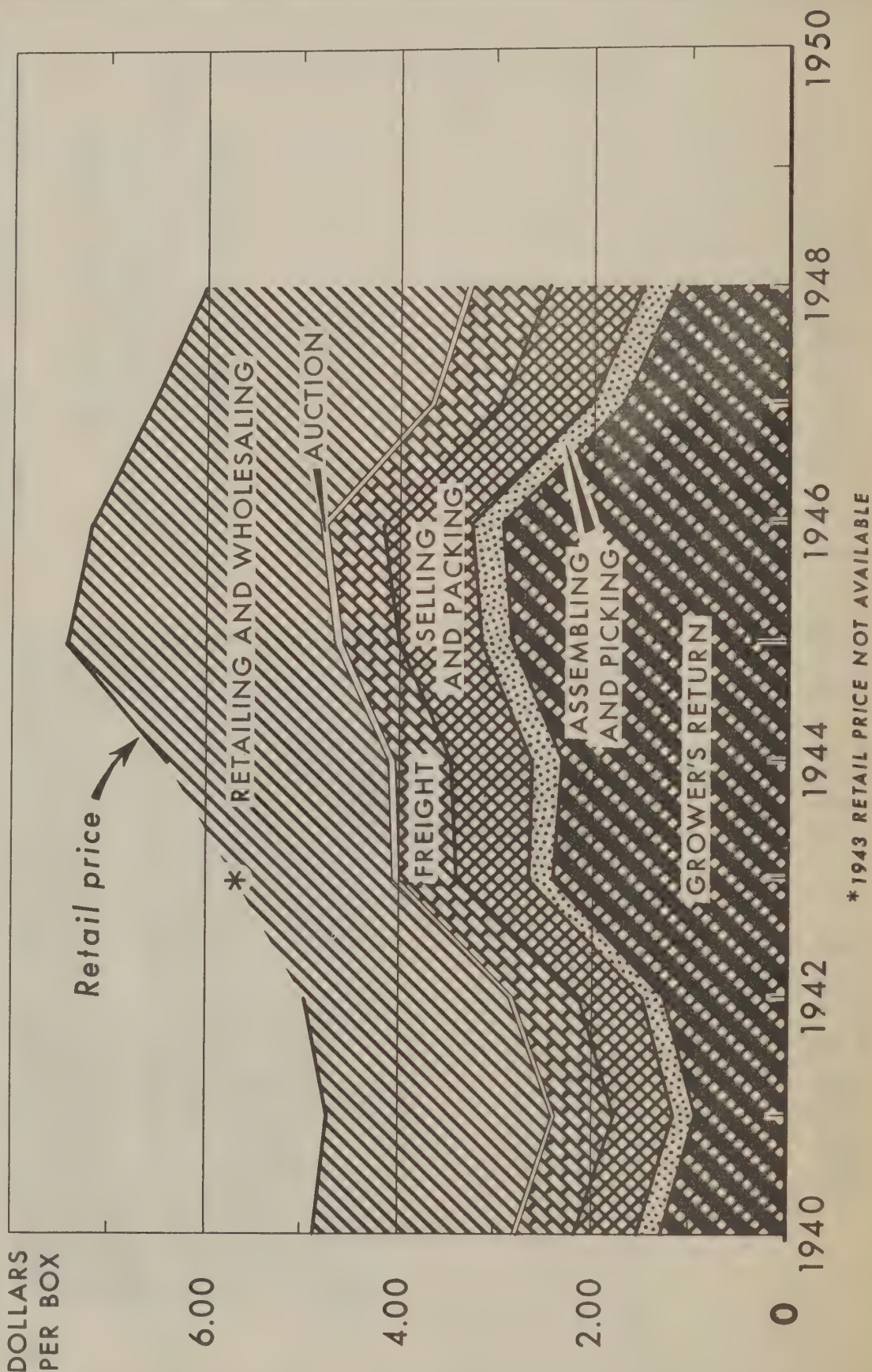
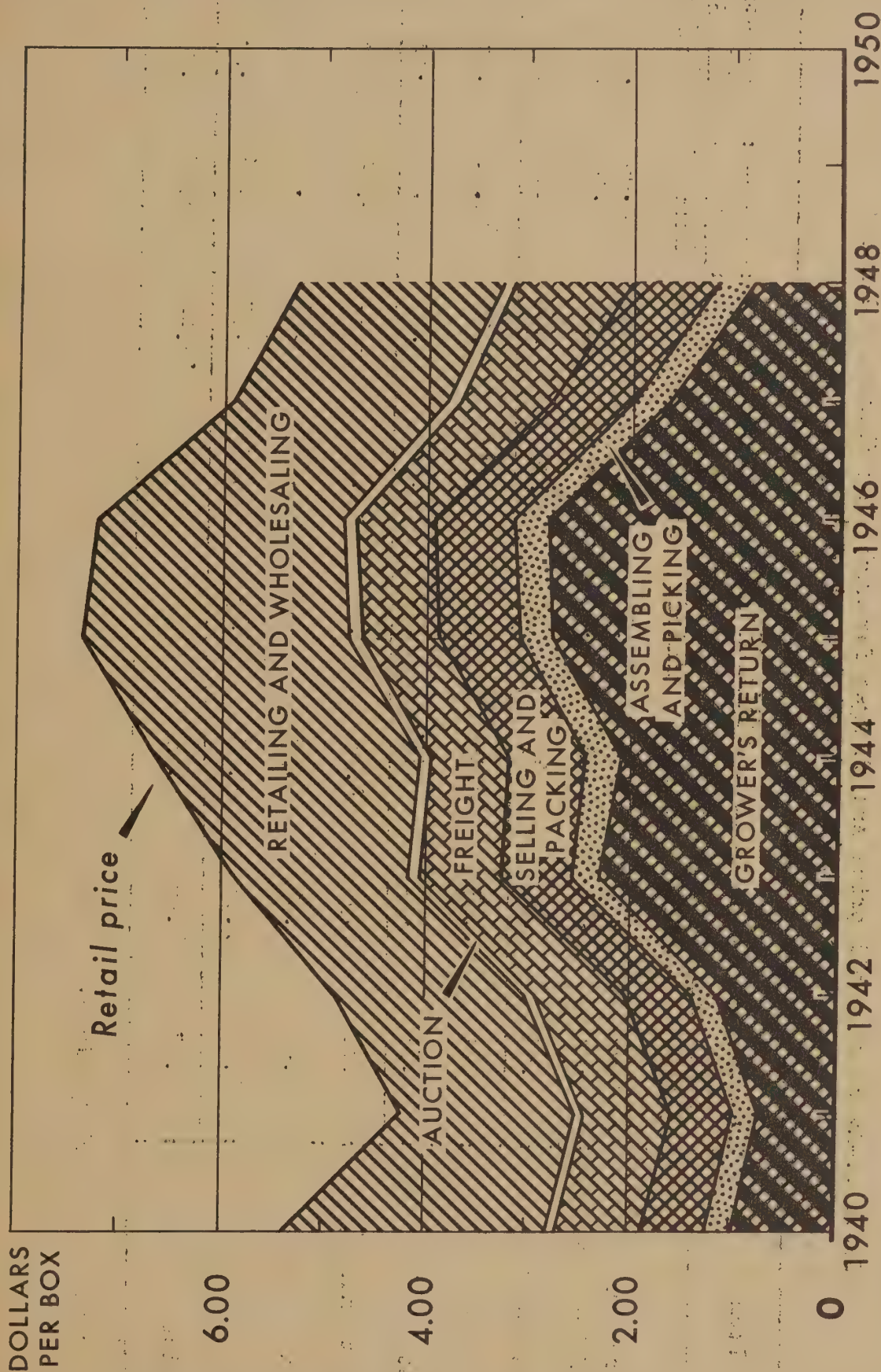


FIGURE 2

FLORIDA VALENCIA ORANGES: BREAK-DOWN OF THE CHICAGO RETAIL PRICE, MARCH THROUGH MAY, 1940-48



U. S. DEPARTMENT OF AGRICULTURE

NEG. 47389-X BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 3

Table 1.--Average retail price and charges for marketing Florida Valencia oranges in eight cities, 1940-48 ^{1/}

Item	Price or charge per box								
	1940 Dollars	1941 Dollars	1942 Dollars	1943 Dollars	1944 Dollars	1945 Dollars	1946 Dollars	1947 Dollars	1948 Dollars
Grower's return	1.04	0.79	1.17	2.22	2.09	2.61	2.68	1.58	0.94
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.63	.61	.65	.68	.76	.84	.81	.86	.89
F.O.B.	1.91	1.63	2.05	3.16	3.17	3.76	3.81	2.76	2.17
Freight	.71	.71	.73	.69	.68	.68	.68	.79	.97
Delivered to market	2.62	2.34	2.78	3.85	3.85	4.44	4.49	3.55	3.14
Auction	.09	.09	.10	.12	.12	.13	.13	.11	.10
Wholesale and retail	1.92	1.83	1.57	2.03	2.17	2.37	1.63	2.34	2.18
Retail price	4.63	4.26	4.45	6.00	6.14	6.94	6.25	6.00	5.42

^{1/} 5 percent waste and spoilage.

Table 2.-Retail price and charges for marketing Florida Valencia oranges
in Boston, Mass., 1940-48 1/

Item	Price or charge per box								
	1940	1941	1942	1943	1944	1945	1946	1947	1948
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Grower's return	1.05	0.76	1.23	2.21	2.12	2.60	2.86	1.59	0.85
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.66	.65	.68	.72	.82	.89	.85	.91	1.00
F.O.B.	1.95	1.64	2.14	3.19	3.26	3.80	4.03	2.82	2.19
Freight	.72	.72	.73	.70	.69	.69	.69	.79	1.06
Delivered to market	2.67	2.36	2.87	3.89	3.95	4.49	4.72	3.61	3.25
Auction	.11	.10	.11	.13	.13	.15	.15	.13	.12
Wholesale and retail	1.90		1.54		2.03	2.38	2.00	2.51	2.40
Retail price	4.68		4.52		6.11	7.02	6.87	6.25	5.77

1/ 5 percent waste and spoilage.

Table 3.-Retail price and charges for marketing Florida Valencia oranges
in Baltimore, Md., 1940-48 1/

Item	Price or charge per box								
	1940 Dollars	1941 Dollars	1942 Dollars	1943 Dollars	1944 Dollars	1945 Dollars	1946 Dollars	1947 Dollars	1948 Dollars
Grower's return	1.10	0.85	1.18	2.22	2.17	2.71	2.73	1.59	0.99
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.63	.60	.65	.65	.73	.83	.83	.87	.87
F.O.B.	1.97	1.68	2.06	3.13	3.22	3.85	3.88	2.78	2.20
Freight	.55	.59	.61	.58	.57	.57	.57	.68	.80
Delivered to market	2.52	2.27	2.67	3.71	3.79	4.42	4.45	3.46	3.00
Auction	.10	.10	.11	.13	.13	.14	.14	.12	.11
Wholesale and retail	1.69	1.48	1.86		2.26	2.13	2.17	2.35	1.93
Retail price	4.31	3.85	4.64		6.18	6.69	6.76	5.93	5.04

1/ 5 percent waste and spoilage.

Table 5.-Retail price and charges for marketing Florida Valencia oranges
in Cincinnati, Ohio, 1940-48 ^{1/}

Item	Price or charge per box								
	1940 Dollars	1941 Dollars	1942 Dollars	1943 Dollars	1944 Dollars	1945 Dollars	1946 Dollars	1947 Dollars	1948 Dollars
Grower's return	0.86	0.73	1.16	2.13	1.93	2.45	2.48	1.50	0.88
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.59	.60	.63	.66	.73	.77	.77	.83	.85
F.O.B.	1.69	1.56	2.02	3.05	2.98	3.53	3.57	2.65	2.07
Freight	.68	.68	.61	.66	.65	.65	.63	.77	.94
Delivered to market	2.37	2.24	2.63	3.71	3.63	4.18	4.20	3.42	3.01
Auction	.10	.10	.11	.13	.13	.14	.14	.12	.11
Wholesale and retail	1.63		1.20	1.84	2.20	2.53	2.25	1.81	1.88
Retail price	4.10		3.94	5.68	5.96	6.85	6.59	5.35	5.00

^{1/} 5 percent waste and spoilage.

Table 6.--Retail price and charges for marketing Florida Valencia oranges in Cleveland, Ohio, 1940-48 1/

Item	Price or charge per box								
	1940 Dollars	1941 Dollars	1942 Dollars	1943 Dollars	1944 Dollars	1945 Dollars	1946 Dollars	1947 Dollars	1948 Dollars
Grower's return	1.00	0.77	1.18	2.26	1.96	2.51	2.58	1.65	0.96
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.62	.60	.65	.66	.76	.86	.77	.82	.84
F.O.B.	1.86	1.60	2.06	3.18	3.04	3.68	3.67	2.79	2.14
Freight	.86	.86	.88	.83	.81	.81	.81	.93	1.11
Delivered to market	2.72	2.46	2.94	4.01	3.85	4.49	4.48	3.72	3.25
Auction	.08	.08	.09	.11	.11	.13	.13	.11	.10
Wholesale and retail	2.22				1.85	2.05	2.29	2.33	1.95
Retail price	5.02				5.81	6.67	6.90	6.16	5.30

1/ 5 percent waste and spoilage.

Table 7.-Retail price and charges for marketing Florida Valencia oranges
in New York, N. Y., 1940-48 1/

Item	Price or charge per box								
	1940 Dollars	1941 Dollars	1942 Dollars	1943 Dollars	1944 Dollars	1945 Dollars	1946 Dollars	1947 Dollars	1948 Dollars
Grower's return	1.23	0.93	1.26	2.36	2.27	2.78	2.82	1.65	1.13
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.63	.61	.66	.73	.83	.87	.90	.91	.97
F.O.B.	2.10	1.77	2.15	3.35	3.42	3.96	4.04	2.88	2.44
Freight	.60	.60	.68	.59	.58	.58	.58	.68	.80
Delivered to market	2.70	2.37	2.83	3.94	4.00	4.54	4.62	3.56	3.24
Auction	.05	.04	.05	.07	.07	.08	.08	.06	.06
Wholesale and retail	2.13	2.31	2.09		2.32	2.81	2.48	2.94	2.71
Retail price	4.88	4.72	4.97		6.39	7.43	7.18	6.56	6.01

1/ 5 percent waste and spoilage.

Table 8.-Retail price and charges for marketing Florida Valencia oranges
in Philadelphia, Pa., 1949-48 ^{1/}

Item	Price or charge per box								
	1940 Dollars	1941 Dollars	1942 Dollars	1943 Dollars	1944 Dollars	1945 Dollars	1946 Dollars	1947 Dollars	1948 Dollars
Grower's return	1.07	0.76	1.11	2.27	2.15	2.70	2.53	1.53	1.01
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.63	.62	.66	.69	.77	.84	.86	.87	.92
F.O.B.	1.94	1.61	2.00	3.22	3.24	3.85	3.71	2.72	2.27
Freight	.60	.60	.68	.59	.58	.58	.58	.68	.80
Delivered to market	2.54	2.21	2.68	3.81	3.82	4.43	4.29	3.40	3.07
Auction	.10	.09	.10	.12	.12	.13	.13	.11	.11
Wholesale and retail	1.62			1.84	2.39	2.64	2.78	2.78	2.57
Retail price	4.26			5.77	6.33	7.20	7.20	6.29	5.75

^{1/} 5 percent waste and spoilage.

Table 9.-Retail price and charges for marketing Florida Valencia oranges
in Pittsburgh, Pa., 1940-48 1/

Item	Price or charge per box								
	1940 Dollars	1941 Dollars	1942 Dollars	1943 Dollars	1944 Dollars	1945 Dollars	1946 Dollars	1947 Dollars	1948 Dollars
Grower's return	0.79	0.73	1.08	2.14	2.07	2.52	2.74	1.53	0.91
Picking and assembling	.24	.23	.23	.26	.32	.31	.32	.32	.34
Packing and selling	.65	.59	.65	.66	.73	.86	.77	.82	.84
F.O.B.	1.68	1.55	1.96	3.06	3.12	3.69	3.83	2.67	2.09
Freight	.83	.77	.78	.80	.78	.78	.78	.90	1.09
Delivered to market	2.51	2.32	2.74	3.86	3.90	4.47	4.61	3.57	3.18
Auction	.09	.09	.10	.12	.12	.14	.14	.12	.11
Wholesale and retail	1.82		.97	2.74	1.66	1.74	2.25	1.88	1.96
Retail price	4.42		3.81	6.72	5.68	6.35	7.00	5.57	5.25

1/ 5 percent waste and spoilage.

